

US EPA ARCHIVE DOCUMENT

# Case Study of a wildlife response to a fuel oil spill in the Glomma River, Norway

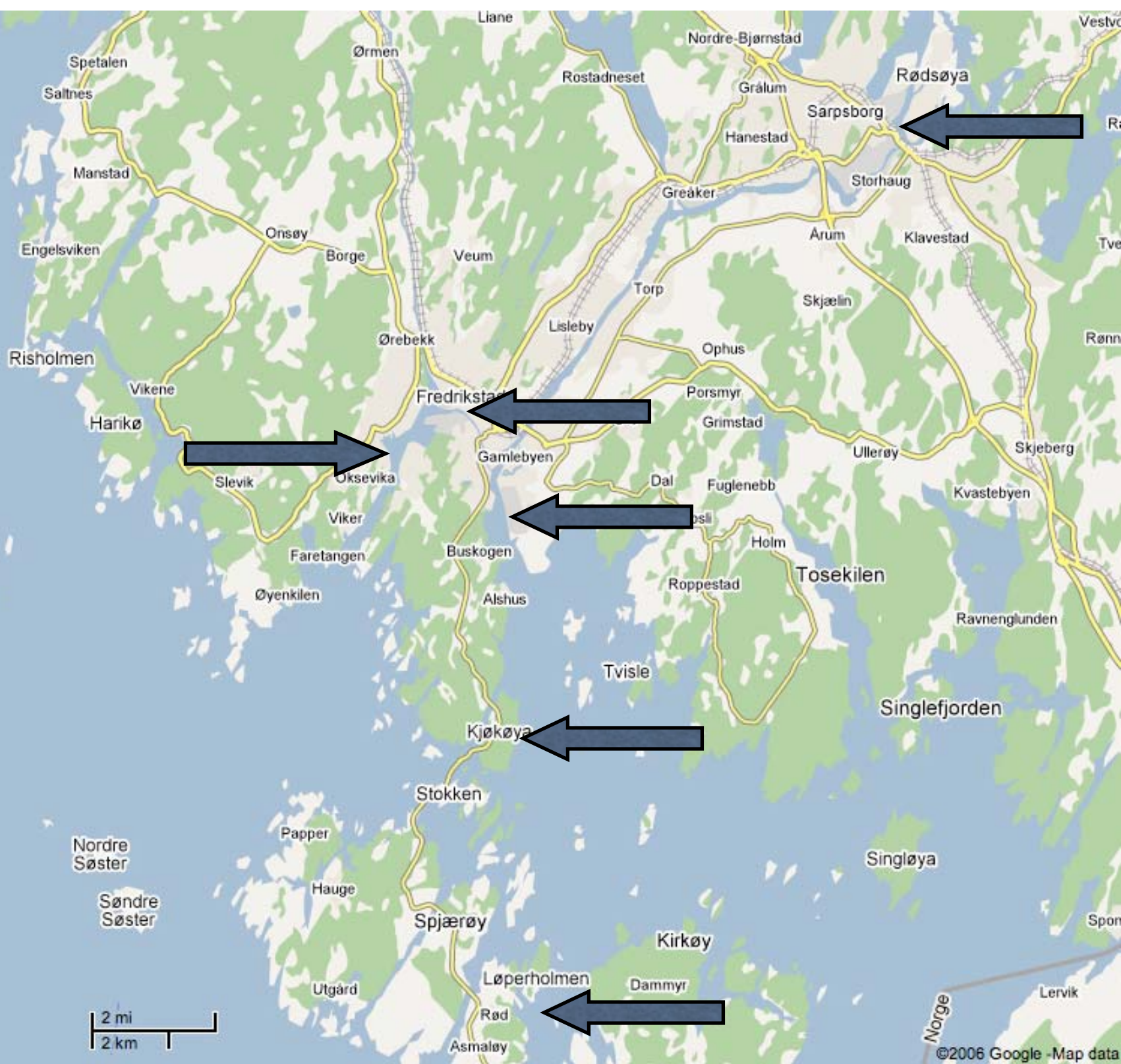
Curt Clumpner - International Bird Rescue Research Center  
IFAW Emergency Relief Oiled Wildlife Team

# Glomma River Spill

- Occured March 4, 2006
- Sarpsborg, Norway
- ~200 barrels of fuel oil
- Transfer from ship
- Discovered March 8 when ice broke up
- Currents had carried oil downstream to ocean inlet at Fredrikstadt







Spill Site

Oiled birds

Wildlife Center

# Historical Context

- **Wildlife Response in Norway**
  - **Prior to January 2004**
    - **Government supported killing of oiled birds**
  - **Post January 2004**
    - **Rocknes Wildlife Response**
    - **Glomma River Wildlife Response**



# Wildlife Team Organizations

## NGO's

Norwegian Oiled Wildlife Response Team  
(NOW)

Naturvernforbundet (FOE Norway)

NOF - Østfold (Norwegian Ornithological  
Society)

Frivillige

IFAW Emergency Relief Team - Oiled  
Wildlife

SeaAlarm/Project Blue Sea

RP - Borregaard - Chemical Div, Orkla  
Group

# Challenges

## **Initial Delay**

**Notification 5 days after spill**

**First wildlife responder arrived March 10**

**Lack of wildlife planning/experience**

**Identification and outfitting of facility**

**Weather**



# Field Challenges

**Weather**

**Animal's condition**

**Lack of experience**

**Volunteer field crews  
mainly weekends**



Photos: SWAN



Photos: SWAN



# Protocols

- Intake
- Stabilization
- Cleaning
- Conditioning
- Release

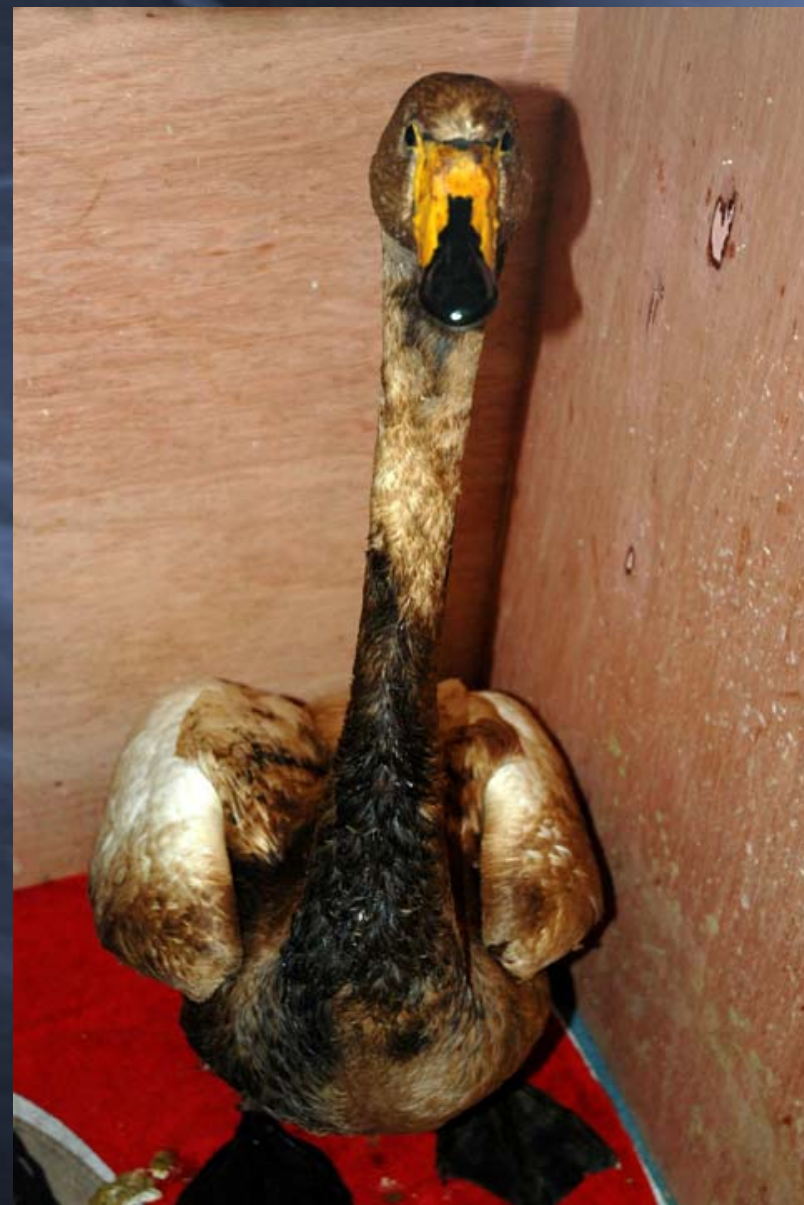


Photo: Marie Travers



# Intake

- Start individual documentation
- Physical exam
  - Identify species
  - Evaluate condition
  - Evaluate oiling
  - Weigh
- Blood sample
- Temporary Band



# Stabilization

- Supportive care
  - Ambient Temperature
  - Fluids
  - Gavage nutritional formula
  - Encourage self feeding



QuickTime™ and a  
DV/DVCPRO - NTSC decompressor  
are needed to see this picture.



# Cleaning

Evaluating for cleaning

Washing

Rinsing

Drying





# Conditioning Challenges

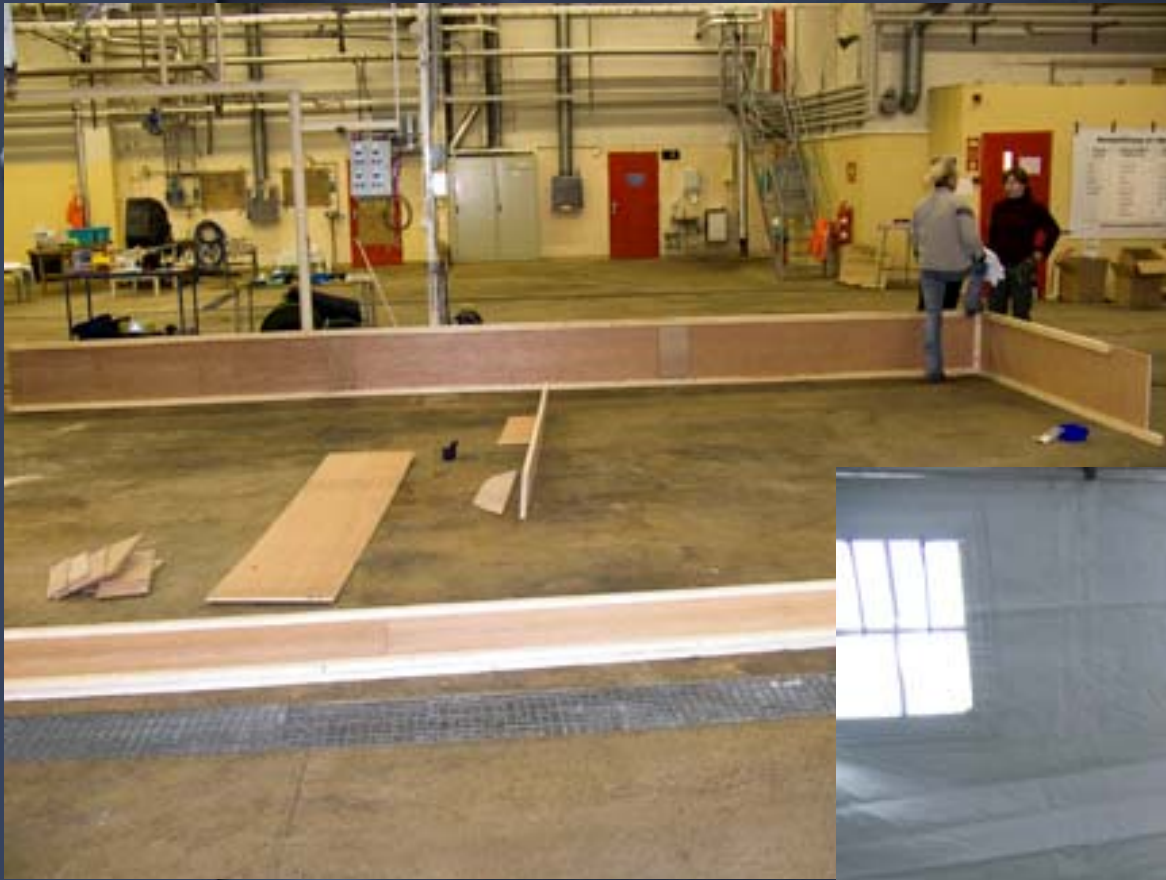
- **Weather**
  - **Mostly below freezing temperatures**
- **Species**
  - **Mostly very large**
- **Lack of Pools**
  - **Had to be built**













# Release Criteria

**Waterproof**

**Physical Exam**

**Weight within normal ranges**

**Blood values within normal ranges**

**All injuries healed**



Photos SWAN



# Additional Issues



Media

## Avian Influenza





# Oiled Species in Care

- Whooper Swan *Cygnus cygnus*
- Mute Swan *Cygnus olor*
- Mallard *Anas platyrhynchos*
- Goosander *Mergus merganser*
- Herring Gull *Larus argentatus*

# Summary-Oiled Birds

Species	In care	Released	Died	Euthanized
	3	3		
	26	25		1
	1	1		
	21	15	2	4
	1	1		

# Conclusions

- Sometimes even with delays, bad weather and little preparation oiled birds can be successfully rehabilitated
- Species make a difference
- Globally, the acceptance of wildlife response during an oil spill continues to grow



# Thanks to

- Karen Tvedt
- Naomi Paulsen
- Pål Bugge
- Marie Travers
- Valeria Ruoppolo
- All of the volunteers (80) for 1300 hours of help
- As well as IFAW, NOW, Naturvernforbundet, NOF, DeNoFa, Borregard and everyone in the community who donated supplies and equipment